RETURN TO MAIN MENU

IM668
April, 2007

STATIFLEX™ 400-M Base Unit

For use with machines having Code Numbers: **K1742-1**

Safety Depends on You

Lincoln arc welding and cutting equipment is designed and built with safety in mind. However, your overall safety can be increased by proper installation ... and thoughtful operation on your part. **DO NOT INSTALL, OPERATE OR REPAIR THIS EQUIPMENT WITHOUT READING THIS MANUAL AND THE SAFETY PRECAUTIONS CONTAINED THROUGHOUT.** And, most importantly, think before you act and be careful.

OPERATOR'S MANUAL

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LINCOLN® ELECTRIC

• World's Leader in Welding and Cutting Products •
• Sales and Service through Subsidiaries and Distributors Worldwide •
Cleveland, Ohio 44117-1199 U.S.A. TEL: 216.481.8100 FAX: 216.486.1751 WEB SITE: www.lincolnelectric.com

SAFETY

⚠ WARNING

⚠ CALIFORNIA PROPOSITION 65 WARNINGS ⚠

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

The Above For Diesel Engines

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

The Above For Gasoline Engines

ARC WELDING CAN BE HAZARDOUS. PROTECT YOURSELF AND OTHERS FROM POSSIBLE SERIOUS INJURY OR DEATH. KEEP CHILDREN AWAY. PACEMAKER WEARERS SHOULD CONSULT WITH THEIR DOCTOR BEFORE OPERATING.

Read and understand the following safety highlights. For additional safety information, it is strongly recommended that you purchase a copy of "Safety in Welding & Cutting - ANSI Standard Z49.1" from the American Welding Society, P.O. Box 351040, Miami, Florida 33135 or CSA Standard W117.2-01. A Free copy of "Arc Welding Safety" booklet E205 is available from the Lincoln Electric Company, 22801 St. Clair Avenue, Cleveland, Ohio 44117-1199.

BE SURE THAT ALL INSTALLATION, OPERATION, MAINTENANCE AND REPAIR PROCEDURES ARE PERFORMED ONLY BY QUALIFIED INDIVIDUALS.

FOR ENGINE powered equipment.

1.a. Turn the engine off before troubleshooting and maintenance work unless the maintenance work requires it to be running.

1.b. Operate engines in open, well-ventilated areas or vent the engine exhaust fumes outdoors.

1.c. Do not add the fuel near an open flame welding arc or when the engine is running. Stop the engine and allow it to cool before refueling to prevent spilled fuel from vaporizing on contact with hot engine parts and igniting. Do not spill fuel when filling tank. If fuel is spilled, wipe it up and do not start engine until fumes have been eliminated.

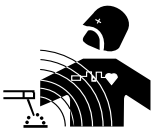
1.d. Keep all equipment safety guards, covers and devices in position and in good repair.Keep hands, hair, clothing and tools away from V-belts, gears, fans and all other moving parts when starting, operating or repairing equipment.

1.e. In some cases it may be necessary to remove safety guards to perform required maintenance. Remove guards only when necessary and replace them when the maintenance requiring their removal is complete. Always use the greatest care when working near moving parts.

1.f. Do not put your hands near the engine fan. Do not attempt to override the governor or idler by pushing on the throttle control rods while the engine is running.

1.g. To prevent accidentally starting gasoline engines while turning the engine or welding generator during maintenance work, disconnect the spark plug wires, distributor cap or magneto wire as appropriate.

1.h. To avoid scalding, do not remove the radiator pressure cap when the engine is hot.



ELECTRIC AND MAGNETIC FIELDS may be dangerous

2.a. Electric current flowing through any conductor causes localized Electric and Magnetic Fields (EMF). Welding current creates EMF fields around welding cables and welding machines

2.b. EMF fields may interfere with some pacemakers, and welders having a pacemaker should consult their physician before welding.

2.c. Exposure to EMF fields in welding may have other health effects which are now not known.

2.d. All welders should use the following procedures in order to minimize exposure to EMF fields from the welding circuit:

2.d.1. Route the electrode and work cables together - Secure them with tape when possible.

2.d.2. Never coil the electrode lead around your body.

2.d.3. Do not place your body between the electrode and work cables. If the electrode cable is on your right side, the work cable should also be on your right side.

2.d.4. Connect the work cable to the workpiece as close as possible to the area being welded.

2.d.5. Do not work next to welding power source.

Mar '95

ELECTRIC SHOCK can kill.

3.a. The electrode and work (or ground) circuits are electrically “hot” when the welder is on. Do not touch these “hot” parts with your bare skin or wet clothing. Wear dry, hole-free gloves to insulate hands.

3.b. Insulate yourself from work and ground using dry insulation. Make certain the insulation is large enough to cover your full area of physical contact with work and ground.

In addition to the normal safety precautions, if welding must be performed under electrically hazardous conditions (in damp locations or while wearing wet clothing; on metal structures such as floors, gratings or scaffolds; when in cramped positions such as sitting, kneeling or lying, if there is a high risk of unavoidable or accidental contact with the workpiece or ground) use the following equipment:

- **Semiautomatic DC Constant Voltage (Wire) Welder.**
- **DC Manual (Stick) Welder.**
- **AC Welder with Reduced Voltage Control.**

3.c. In semiautomatic or automatic wire welding, the electrode, electrode reel, welding head, nozzle or semiautomatic welding gun are also electrically “hot”.

3.d. Always be sure the work cable makes a good electrical connection with the metal being welded. The connection should be as close as possible to the area being welded.

3.e. Ground the work or metal to be welded to a good electrical (earth) ground.

3.f. Maintain the electrode holder, work clamp, welding cable and welding machine in good, safe operating condition. Replace damaged insulation.

3.g. Never dip the electrode in water for cooling.

3.h. Never simultaneously touch electrically “hot” parts of electrode holders connected to two welders because voltage between the two can be the total of the open circuit voltage of both welders.

3.i. When working above floor level, use a safety belt to protect yourself from a fall should you get a shock.

3.j. Also see Items 6.c. and 8.

ARC RAYS can burn.

4.a. Use a shield with the proper filter and cover plates to protect your eyes from sparks and the rays of the arc when welding or observing open arc welding. Headshield and filter lens should conform to ANSI Z87. I standards.

4.b. Use suitable clothing made from durable flame-resistant material to protect your skin and that of your helpers from the arc rays.

4.c. Protect other nearby personnel with suitable, non-flammable screening and/or warn them not to watch the arc nor expose themselves to the arc rays or to hot spatter or metal.

FUMES AND GASES can be dangerous.

5.a. Welding may produce fumes and gases hazardous to health. Avoid breathing these fumes and gases.When welding, keep your head out of the fume. Use enough ventilation and/or exhaust at the arc to keep fumes and gases away from the breathing zone. **When welding with electrodes which require special ventilation such as stainless or hard facing (see instructions on container or MSDS) or on lead or cadmium plated steel and other metals or coatings which produce highly toxic fumes, keep exposure as low as possible and below Threshold Limit Values (TLV) using local exhaust or mechanical ventilation. In confined spaces or in some circumstances, outdoors, a respirator may be required. Additional precautions are also required when welding on galvanized steel.**

5. b. The operation of welding fume control equipment is affected by various factors including proper use and positioning of the equipment, maintenance of the equipment and the specific welding procedure and application involved. Worker exposure level should be checked upon installation and periodically thereafter to be certain it is within applicable OSHA PEL and ACGIH TLV limits.

5.c. Do not weld in locations near chlorinated hydrocarbon vapors coming from degreasing, cleaning or spraying operations. The heat and rays of the arc can react with solvent vapors to form phosgene, a highly toxic gas, and other irritating products.

5.d. Shielding gases used for arc welding can displace air and cause injury or death. Always use enough ventilation, especially in confined areas, to insure breathing air is safe.

5.e. Read and understand the manufacturer’s instructions for this equipment and the consumables to be used, including the material safety data sheet (MSDS) and follow your employer’s safety practices. MSDS forms are available from your welding distributor or from the manufacturer.

5.f. Also see item 1.b.

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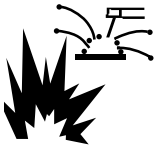


WELDING and CUTTING SPARKS can cause fire or explosion.

6.a. Remove fire hazards from the welding area. If this is not possible, cover them to prevent the welding sparks from starting a fire. Remember that welding sparks and hot materials from welding can easily go through small cracks and openings to adjacent areas. Avoid welding near hydraulic lines. Have a fire extinguisher readily available.

6.b. Where compressed gases are to be used at the job site, special precautions should be used to prevent hazardous situations. Refer to "Safety in Welding and Cutting" (ANSI Standard Z49.1) and the operating information for the equipment being used.

6.c. When not welding, make certain no part of the electrode circuit is touching the work or ground. Accidental contact can cause overheating and create a fire hazard.

6.d. Do not heat, cut or weld tanks, drums or containers until the proper steps have been taken to insure that such procedures will not cause flammable or toxic vapors from substances inside. They can cause an explosion even though they have been "cleaned". For information, purchase "Recommended Safe Practices for the Preparation for Welding and Cutting of Containers and Piping That Have Held Hazardous Substances", AWS F4.1 from the American Welding Society (see address above).

6.e. Vent hollow castings or containers before heating, cutting or welding. They may explode.

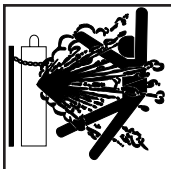
6.f. Sparks and spatter are thrown from the welding arc. Wear oil free protective garments such as leather gloves, heavy shirt, cuffless trousers, high shoes and a cap over your hair. Wear ear plugs when welding out of position or in confined places. Always wear safety glasses with side shields when in a welding area.

6.g. Connect the work cable to the work as close to the welding area as practical. Work cables connected to the building framework or other locations away from the welding area increase the possibility of the welding current passing through lifting chains, crane cables or other alternate circuits. This can create fire hazards or overheat lifting chains or cables until they fail.

6.h. Also see item 1.c.

6.I. Read and follow NFPA 51B " Standard for Fire Prevention During Welding, Cutting and Other Hot Work", available from NFPA, 1 Batterymarch Park,PO box 9101, Quincy, Ma 022690-9101.

6.j. Do not use a welding power source for pipe thawing.



CYLINDER may explode if damaged.

7.a. Use only compressed gas cylinders containing the correct shielding gas for the process used and properly operating regulators designed for the gas and pressure used. All hoses, fittings, etc. should be suitable for the application and maintained in good condition.

7.b. Always keep cylinders in an upright position securely chained to an undercarriage or fixed support.

7.c. Cylinders should be located:

- Away from areas where they may be struck or subjected to physical damage.
- A safe distance from arc welding or cutting operations and any other source of heat, sparks, or flame.

7.d. Never allow the electrode, electrode holder or any other electrically "hot" parts to touch a cylinder.

7.e. Keep your head and face away from the cylinder valve outlet when opening the cylinder valve.

7.f. Valve protection caps should always be in place and hand tight except when the cylinder is in use or connected for use.

7.g. Read and follow the instructions on compressed gas cylinders, associated equipment, and CGA publication P-l, "Precautions for Safe Handling of Compressed Gases in Cylinders," available from the Compressed Gas Association 1235 Jefferson Davis Highway, Arlington, VA 22202.

FOR ELECTRICALLY powered equipment.

8.a. Turn off input power using the disconnect switch at the fuse box before working on the equipment.

8.b. Install equipment in accordance with the U.S. National Electrical Code, all local codes and the manufacturer's recommendations.

8.c. Ground the equipment in accordance with the U.S. National Electrical Code and the manufacturer's recommendations.

Jan, 07

PRÉCAUTIONS DE SÛRETÉ

Pour votre propre protection lire et observer toutes les instructions et les précautions de sûreté specifiques qui parraissent dans ce manuel aussi bien que les précautions de sûreté générales suivantes:

Sûreté Pour Soudage A L'Arc

1. Protegez-vous contre la secousse électrique:

   a. Les circuits à l'électrode et à la piéce sont sous tension quand la machine à souder est en marche. Eviter toujours tout contact entre les parties sous tension et la peau nue ou les vétements mouillés. Porter des gants secs et sans trous pour isoler les mains.
   b. Faire trés attention de bien s'isoler de la masse quand on soude dans des endroits humides, ou sur un plancher metallique ou des grilles metalliques, principalement dans les positions assis ou couché pour lesquelles une grande partie du corps peut être en contact avec la masse.
   c. Maintenir le porte-électrode, la pince de masse, le câble de soudage et la machine à souder en bon et sûr état defonctionnement.
   d.Ne jamais plonger le porte-électrode dans l'eau pour le refroidir.
   e. Ne jamais toucher simultanément les parties sous tension des porte-électrodes connectés à deux machines à souder parce que la tension entre les deux pinces peut être le total de la tension à vide des deux machines.
   f. Si on utilise la machine à souder comme une source de courant pour soudage semi-automatique, ces precautions pour le porte-électrode s'applicuent aussi au pistolet de soudage.

2. Dans le cas de travail au dessus du niveau du sol, se protéger contre les chutes dans le cas ou on recoit un choc. Ne jamais enrouler le câble-électrode autour de n'importe quelle partie du corps.

3. Un coup d'arc peut être plus sévère qu'un coup de soliel, donc:

   a. Utiliser un bon masque avec un verre filtrant approprié ainsi qu'un verre blanc afin de se protéger les yeux du rayonnement de l'arc et des projections quand on soude ou quand on regarde l'arc.
   b. Porter des vêtements convenables afin de protéger la peau de soudeur et des aides contre le rayonnement de l'arc.
   c. Protéger l'autre personnel travaillant à proximité au soudage à l'aide d'écrans appropriés et non-inflammables.

4. Des gouttes de laitier en fusion sont émises de l'arc de soudage. Se protéger avec des vêtements de protection libres de l'huile, tels que les gants en cuir, chemise épaisse, pantalons sans revers, et chaussures montantes.

5. Toujours porter des lunettes de sécurité dans la zone de soudage. Utiliser des lunettes avec écrans lateraux dans les zones où l'on pique le laitier.

6. Eloigner les matériaux inflammables ou les recouvrir afin de prévenir tout risque d'incendie dû aux étincelles.

7. Quand on ne soude pas, poser la pince à une endroit isolé de la masse. Un court-circuit accidental peut provoquer un échauffement et un risque d'incendie.

8. S'assurer que la masse est connectée le plus prés possible de la zone de travail qu'il est pratique de le faire. Si on place la masse sur la charpente de la construction ou d'autres endroits éloignés de la zone de travail, on augmente le risque de voir passer le courant de soudage par les chaines de levage, câbles de grue, ou autres circuits. Cela peut provoquer des risques d'incendie ou d'echauffement des chaines et des câbles jusqu'à ce qu'ils se rompent.

9. Assurer une ventilation suffisante dans la zone de soudage. Ceci est particuliérement important pour le soudage de tôles galvanisées plombées, ou cadmiées ou tout autre métal qui produit des fumeés toxiques.

10. Ne pas souder en présence de vapeurs de chlore provenant d'opérations de dégraissage, nettoyage ou pistolage. La chaleur ou les rayons de l'arc peuvent réagir avec les vapeurs du solvant pour produire du phosgéne (gas fortement toxique) ou autres produits irritants.

11. Pour obtenir de plus amples renseignements sur la sûreté, voir le code "Code for safety in welding and cutting" CSA Standard W 117.2-1974.

PRÉCAUTIONS DE SÛRETÉ POUR LES MACHINES À SOUDER À TRANSFORMATEUR ET À REDRESSEUR

1. Relier à la terre le chassis du poste conformement au code de l'électricité et aux recommendations du fabricant. Le dispositif de montage ou la piece à souder doit être branché à une bonne mise à la terre.

2. Autant que possible, l'installation et l'entretien du poste seront effectués par un électricien qualifié.

3. Avant de faires des travaux à l'interieur de poste, la debrancher à l'interrupteur à la boite de fusibles.

4. Garder tous les couvercles et dispositifs de sûreté à leur place.

Thank You ——— for selecting a **QUALITY** product by Lincoln Electric. We want you to take pride in operating this Lincoln Electric Company product ••• as much pride as we have in bringing this product to you!

CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for advice or information about their use of our products. We respond to our customers based on the best information in our possession at that time. Lincoln Electric is not in a position to warrant or guarantee such advice, and assumes no liability, with respect to such information or advice. We expressly disclaim any warranty of any kind, including any warranty of fitness for any customer's particular purpose, with respect to such information or advice. As a matter of practical consideration, we also cannot assume any responsibility for updating or correcting any such information or advice once it has been given, nor does the provision of information or advice create, expand or alter any warranty with respect to the sale of our products.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.

Please Examine Carton and Equipment For Damage Immediately

When this equipment is shipped, title passes to the purchaser upon receipt by the carrier. Consequently, Claims for material damaged in shipment must be made by the purchaser against the transportation company at the time the shipment is received.

Please record your equipment identification information below for future reference. This information can be found on your machine nameplate.

Product _____

Model Number _____

Code Number or Date Code_____

Serial Number_____

Date Purchased_____

Where Purchased_____

Whenever you request replacement parts or information on this equipment, always supply the information you have recorded above. The code number is especially important when identifying the correct replacement parts.

On-Line Product Registration

- Register your machine with Lincoln Electric either via fax or over the Internet.
  - For faxing: Complete the form on the back of the warranty statement included in the literature packet accompanying this machine and fax the form per the instructions printed on it.
  - For On-Line Registration: Go to our **WEB SITE at www.lincolnelectric.com.** Choose "Quick Links" and then "Product Registration". Please complete the form and submit your registration.

Read this Operators Manual completely before attempting to use this equipment. Save this manual and keep it handy for quick reference. Pay particular attention to the safety instructions we have provided for your protection. The level of seriousness to be applied to each is explained below:

⚠ WARNING

This statement appears where the information **must** be followed **exactly** to avoid **serious personal injury** or **loss of life**.

⚠ CAUTION

This statement appears where the information **must** be followed to avoid **minor personal injury** or **damage to this equipment**.

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PREFACE

Using this Instruction Manual

This instruction manual is intended to be used as a work of reference for professional, well trained and authorized users to be able to safely install, use, maintain and repair the product mentioned on the cover of this document.

Always keep this manual with the product.

Pictograms and Symbols

The following pictograms and symbols are used in this manual:

	TIP Suggestions and recommendations to simplify carrying out tasks and actions.
	ATTENTION! Remark with additional information for the user. A remark brings a possible problem to the user's attention.
	CAUTION! This statement appears where the instructions **must** be followed to avoid **minor personal injury** or **damage to this equipment**.
	WARNING! This statement appears where the instructions **must** be followed **exactly** to avoid **serious personal injury** or **loss of life**.
	WARNING! Important warning to prevent fire.

Service and Technical Support

For information about specific adjustments, maintenance or repair jobs which are not dealt with in this manual, please contact the supplier of the product. Make sure you have the following data on hand:
- product name
- serial number
- purchase order (number + date) for warranty verification

The product name and serial number can be found on the identification label located under the left air inlet of Statiflex 400-MS.

1 INTRODUCTION

1.1 Identification of the Product

The identification label contains the following data:
- product name
- serial number

1.2 General Description

The K1742-1 Statiflex 400-MS wall-mounted filter unit provides filtration for use with one extraction arm and one fan.
The Statiflex 400-MS features an aluminum spark arrester and a round cellulose LongLife filter cartridge providing a filtration efficiency up to 99.8%. This LongLife filter cartridge is provided with a precoat (ExtraCoat) to extend the lifespan and the efficiency of the filter. A separate MSDS sheet for the ExtraCoat is included with the instruction manual package.
The Statiflex 400-MS is provided with a RotaPulse system for automatic cleaning of the LongLife filter cartridge.

The Statiflex 400-MS is used for filtering fume which is released during the most common welding processes, such as:
- MIG/MAG solid wire (GMAW)
- MIG/MAG flux cored wire (FCAW)
- TIG (GTAW) welding
- stick welding (MMA or SMAW)
- autogeneous welding

The Statiflex 400-MS is designed for intermittent or continuous applications above.

The Statiflex 400-MS is recommended for consumable use of approximately*):
- 2,750 kg (6,000 lbs) GMAW or FCAW or GTAW
- 1,800 kg (4,000 lbs) MMA or SMAW or autogeneous

**) Variables such as coatings (e.g. oil), base material, weld process and procedures can affect filter life and performance.*

1.3 Product Combinations

In order to operate the Statiflex 400-MS, selection of following product is required:
- K1656-1 (1) SF 2400 extraction fan required
- K1655-1 (1) LFA 3.1 10 ft. extraction arm; or
- K1655-2 (1) LFA 4.1 13 ft. extraction arm; or
- K1655-5 (1) LFA 2.0 6.5 ft. extraction arm; or
- K1655-6 (1) LFA 4.1-LC extraction arm; or
- K1655-3 (1) LTA 2.0 telescopic extraction arm required
- S23273 (1) CB control box

- K1494-2 (1) starter/overload switch for SF 2400 fan (not required if using optional K1669-4 Lamp Kit with Arc Sensor)
- S23268 (1) 6 in. hose kit with clamps

1.4 Options

The following products can be obtained as an option:
- K1656-4*) SF 4200 in place of SF 2400
- K1669-4 Lamp + Arc Sensor Kit for SF 2400 fan
- K1669-10 Lamp + Arc Sensor Kit for SF 4200 fan
- K1494-10 starter/overload switch for SF 4200 fan (not required if using optional K1669-4 or K1669-10 Lamp + Arc Sensor Kit)
- K1671-1 EC 2 - Extension Crane 7 ft.
- K1671-2 EC 4 - Extension Crane 14 ft.

**) SF 4200 fan unit only used in standard package with Extension Crane configuration.*

1.5 Technical Specifications

Product part #	K1742-1
Dimensions	Refer to Fig. 1.1
Weight	50.5 kgs (111 lbs)
Extraction type	Low vacuum; high volume
Airflow rate	Max. 1,250 m^3/h (735 CFM)
Filter type	Disposable cellulose LongLife filter cartridge with precoat
Filter class	- European Standard DIN EN 60335-2-69: M (filter material without precoat) - American Standard ASHRAE 52.2: Filter medium with MERV11 rating treated with precoat. Efficiency equal to filter medium with MERV15 at 850 CFM rating
Filter surface area	30 m^2 (325 ft^2)
Efficiency	99.8% at ≥0.3 µm (precoated and stabilized filter)
Compressed air connection	4-5 bar (1600-2000 in. WG)
Compressed air consumption	Max. 60 nl/min. (depending on the degree of saturation of the filter)

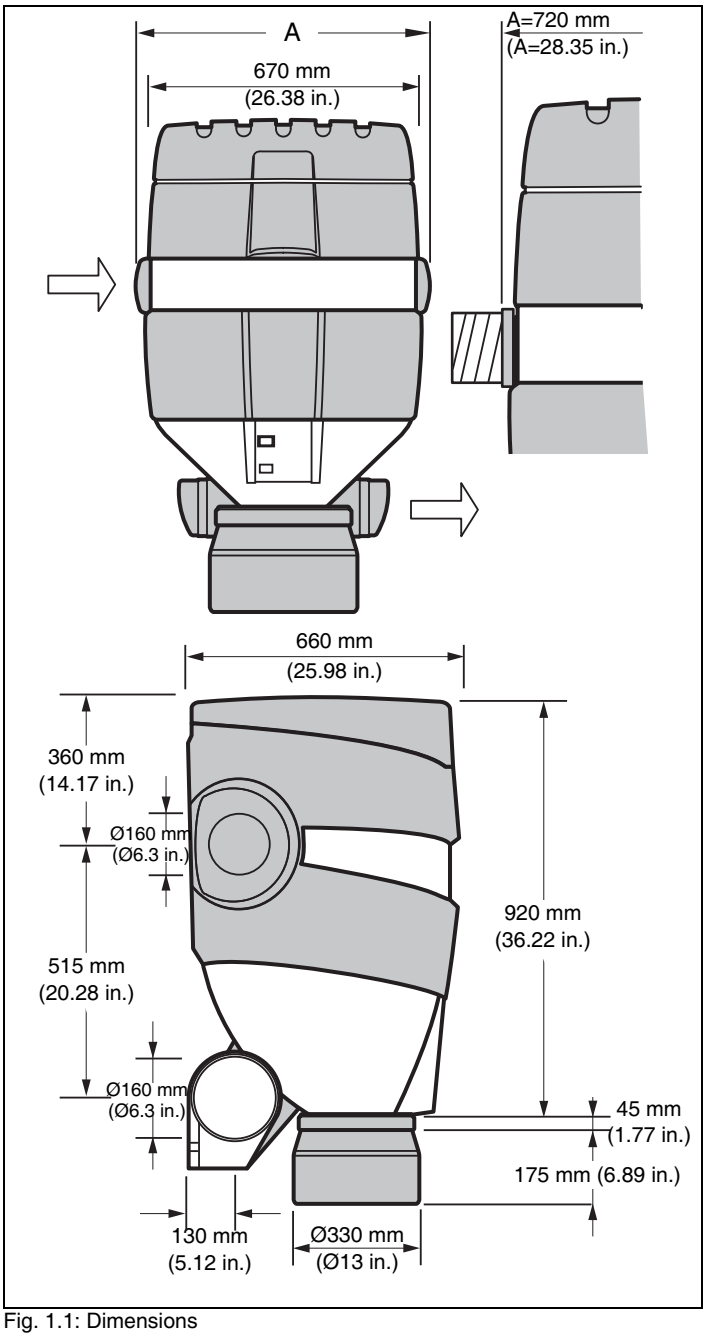


Fig. 1.1: Dimensions

1.6 Ambient Conditions

Min. operating temperature	5°C (41°F)
Nom. operating temperature	20°C (68°F)
Max. operating temperature	45°C (113°F)
Max. relative humidity	80%

2 PRODUCT DESCRIPTION

2.1 Components

The Statiflex 400-MS housing consists of the following main components and features (Fig. 2.1):

A filter cover
B filter housing
C outlet opening
D control panel
E residue collection barrel
F compressed air connection ¼ in.
G optional outlet opening
H spark arrester
I inlet opening
J mounting bracket
K LongLife filter cartridge FCC 30
L RotaPulse automatic filter cleaning system

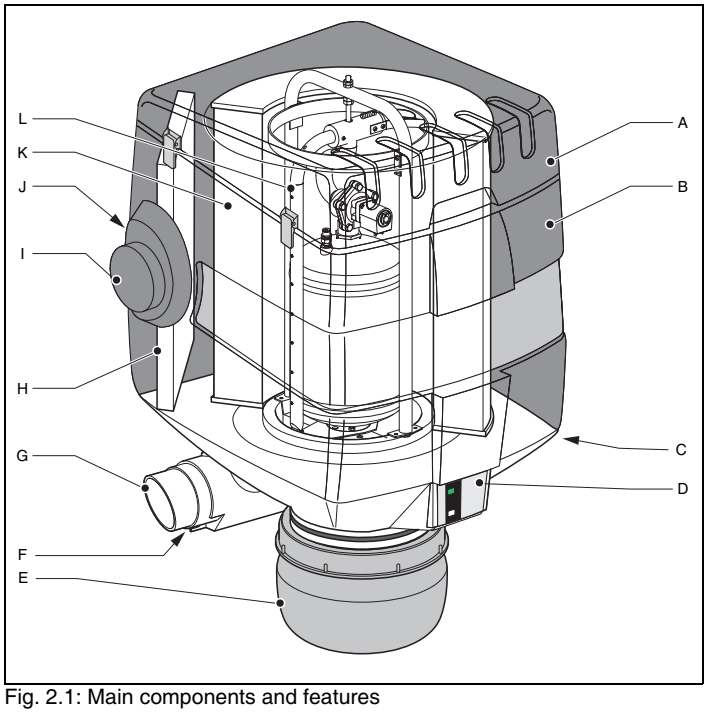


Fig. 2.1: Main components and features

2.2 Operation

The air containing welding fume is captured, extracted and filtered, in which the filtered air can be either recirculated or exhausted. First, the welding fume is extracted through an adjustable fume extraction arm by an external extraction fan. Second, the fan unit exhausts the welding fume via a hose or duct into the Statiflex 400-MS filter unit. Third, as the welding fume enters the Statiflex 400-MS unit, it passes through the spark arrester. The spark arrester separates larger particles, debris and any sparks prior to welding fume entering the LongLife filter. Fourth, as the welding fume passes from the outside through the LongLife filter cartridge (stabilized), 99.8% or more of all particles 0.3 µm or greater are caught. Fifth, after passing through the LongLife filter, the filtered air exits the Statiflex 400-MS via the outlet opening on the right side of unit. If desired, and local or federal regulations permit, filtered air can be recirculated back into work environment or exhausted outside of building.

During use, an electronic pressure differential system measures the static air pressure as it enters and exits the filter cartridge. If the air pressure entering the filter unit is greater than the air pressure exiting the filter unit, the electronic circuit signals the internal cleaning system to clean the filter cartridge. Compressed air from the internal tank releases through multiple airjets to clean one section of the filter cartridge at each air burst. A complete cleaning cycle can be activated by depressing a manual switch on the front of the control panel. The particulate is blown off the filter cartridge into a residue collection barrel.

3 SAFETY

General

The manufacturer does not accept any liability for damage to the product or personal injury caused by non-observance of the safety instructions in this manual, modifications made to equipment or by negligence during installation, use, maintenance and repair of the product mentioned on the cover of this document and any corresponding accessories. Specific working conditions or used accessories may require additional safety instructions. Immediately contact your supplier if you detect a potential hazard when using the product.

ATTENTION!
The operation of welding fume control equipment is affected by various factors including proper use and positioning of the equipment, maintenance of the equipment and the specific welding procedure and application involved. Worker exposure level should be checked upon installation and periodically thereafter to be certain it is within applicable federal, state and/or local regulations and guidelines (i.e. OSHA PEL and ACGIH TLV limits in the U.S.).

User Manual

- Everyone working on or with the product must be familiar with the contents of this manual and must strictly observe the instructions herein. Management should instruct and train the operators in accordance with the manual and observe all instructions and directions given.
- Never change the order of steps-to-be-performed.
- Always keep the manual with the product.

Users
The use of this product is exclusively reserved to authorized, trained and qualified users. Temporary personnel and personnel in training can only use the product under supervision and responsibility of management and trained personnel such as skilled engineers.

Intended Use[1]
The product has been designed exclusively for filtering fume which is released during common weld processes. Using the product for other purposes is considered contrary to its intended use. The manufacturer accepts no liability for any damage or injury resulting from such use. The product has been built in accordance with state-of-the-art standards and recognized safety regulations. Only use the product in mechanially sound condition in accordance with its intended use and the instructions set forth in the user manual.

Modifications
Modifications of this product, other than those specified in this manual, are not allowed. Modifications will void the product warranty.

Use

WARNING!
Fire hazard! Never use the product for filtering inflammable, glowing or burning particles, solids or liquids. Never use the product for filtering of reactive fumes (such as hydrochloric acid) or sharp particles.

If the product is used in combination with products or machines mentioned in the introduction of this manual (refer to section 1.3 and 1.4), the safety instructions in the documentation of these products also apply.

- Routinely inspect the product and check it for damage.
- Use common sense. Stay alert and keep your attention to your work. Do not use the product when you are under the influence of drugs, alcohol or medicine.
- Make sure the facility is always sufficiently ventilated; this applies especially to confined spaces.
- Never install the product in front of entrances and exits which must be used by emergency services.
- Make sure that the facility contains sufficient approved fire extinguishers.
- Always connect the extraction fan to the inlet of the Statiflex 400-MS. **Never** connection the extraction fan to the outlet of the Statiflex 400-MS.
- The Statiflex 400-MS is suitable for connection of only **one** extraction arm and **one** fan. **Never** connect more than one extraction arm and one fan to the Statiflex 400-MS.
- Air containing gases and particles such as OSHA defined hazardous chemicals, if recirculated, should be tested in accordance with applicable local regulations and guidelines, such as OSHA PEL.

WARNING:
Only use the product for the welding processes described in section 1.2. **Avoid** using the product for extracting and/or filtering fumes and gases which are released during the following (welding) processes:
- oil-treated metal
- arc-air gouging
- oil mist
- paint mist
- heavy oil mist in welding fume
- hot gases (more than 40°C/100°F continuously)
- aggressive gases (e.g. from acids)
- plasma cutting
- grinding aluminum and magnesium
- flame spraying
- extraction of cement, saw dust, wood dust etc.
- sucking cigarettes, cigars, oiled tissues and other burning particles, objects and acids
- in all situations where explosions can occur

(This list is not comprehensive.)
If the product is used in above situations it could result in potential fire hazard, non-compliance with local regulations and reduction in product performance and life.

WARNING!
Avoid using the product for filtering dust particles which are released when welding surfaces treated with primer.

WARNING!
Never use the product without spark arrester and LongLife filter cartridge.

Service, Maintenance and Repairs

This manual clearly makes a distinction between service, maintenance and repair jobs which have to be carried out by the user and those which have to be exclusively carried out by well trained and authorized service engineers.

- Observe the maintenance intervals given in this manual. Overdue maintenance can lead to additional costs for repair and revisions and can render the warranty null and void.
- Always use tools, materials, lubricants and service

1. "Intended use" as laid down in EN-292-1 is the use for which the technical product is suited as specified by the manufacturer, inclusive of his directions in the sales brochure. In case of doubt it is the use which can be deducted from the construction, the model and the function of the technical product which is considered normal use. Operating the machine within the limits of its intended use also involves observing the instructions in the user manual.

techniques which have been approved by the manufacturer. Never use worn tools and do not leave any tools in or on the product.
- Regularly clean the spark arrester and the inside of the housing.

4 INSTALLATION

WARNING!
The installer is responsible for following federal, state and local safety codes and regulations.

ATTENTION!
Before drilling, verify locations of existing gas, water or electrical conduits.

For information on installation of fume extraction arm and extraction fan, refer to the corresponding manuals.

4.1 Unpacking

Check that the product package is complete. The package should contain:

- (1) complete filter unit, with filter cartridge installed
- (1) mounting bracket
- (1) instruction manual

If parts are missing or damaged, contact your supplier.

4.2 Installation

4.2.1 Statiflex 400-MS

Mount the Statiflex 400-MS, extraction fan and fume extraction arm as close as possible to the source of welding.

ATTENTION!
Use adequate mounting hardware for installing the unit, corresponding with the type of wall. Be aware, the weight of the unit when unpacked is approx. 50 kg (110 lbs).

The Statiflex 400-MS contains an outlet opening on the right side. If desired, the outlet on the left side can be opened as well (or instead) by using a hacksaw or multi-purpose saw.

Installation Steps:
Fig. 4.1
1) Remove the outlet cover from the right outlet opening.

In case of (future) change of outlet opening from right to left, the outlet cover can be used to shut off the right outlet opening.

2) Install the mounting bracket (D).
3) Place the Statiflex 400-MS (F) onto the mounting bracket (D).
4) Fit the 6 in. connection hose (B) over the outlet of the fan (A) and secure it with a 6 in. hose clamp.
Note: When installing in combination with the SF 4200 fan, first mount flexible outlet with steel bushing (included with SF 4200 fan package) to the fan housing.
5) Fit the 6 in. sealing ring (C) over the inlet (E).
6) Slide the 6 in. connection hose (B) over the 6 in. sealing ring (C) by placing the hose all the way over the sealing ring. Secure with a 6 in. hose clamp.
7) Secure the filter housing by inserting two bolts in the slotted holes near the outlet openings.

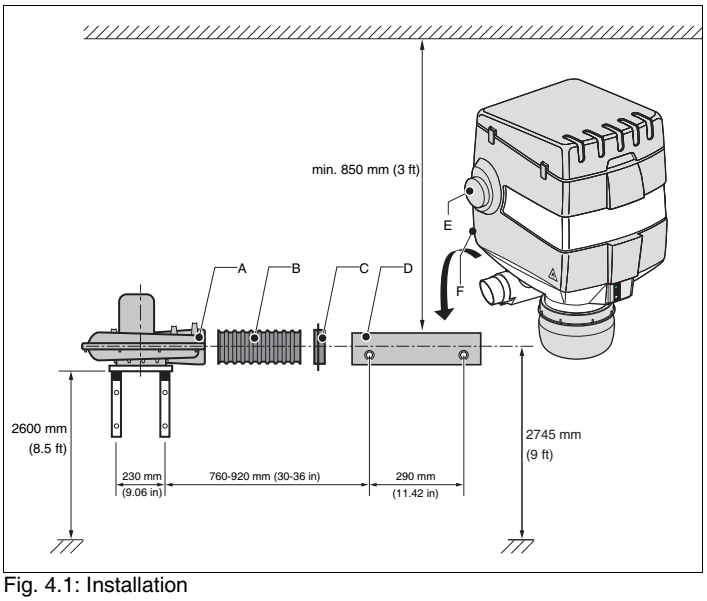


Fig. 4.1: Installation

4.2.2 Control box

The 24 VAC supply for the Statiflex 400-MS is obtained via the CB control box.
Refer to the corresponding manual.

Installation Steps:
1) Connect the supply cable to the three-pin connection block on the rear of the Statiflex 400-MS and on the control box.

CAUTION!
Prevent damage. Note the colour code of the cable when connecting.

4.2.3 Compressed air connection

The filter cleaning system functions on compressed air with a recommended working pressure of 4-5 bar (1600-2000 in. WG). Always make sure that the working pressure is between these values (preferably at 4.5 bar (1800 in. WG). If required, mount a pressure reducing valve to prevent the safety valve from being actuated.

WARNING!
The compressed air should be dry and oil-free.

Installation Steps:
1) Connect the Statiflex 400-MS to compressed air (refer to Fig. 2.1F).

5 OPERATION

5.1 Use

The Statiflex 400-MS is used with extraction arm and fan. For information on use of these products, refer to the instruction manuals of the corresponding arm and/or fan.

5.2 Control panel

Fig. 5.1
The control panel contains the following controls:
A Control light (orange)
- "CLEANING": the control light is **on** indicating that the machine is busy performing the (self-)cleaning process
- "ALARM": the control light **blinks** indicating that the filter is saturated and cannot be cleaned sufficiently in the automatic cleaning mode

B RESET/START button for off-line cleaning and reset

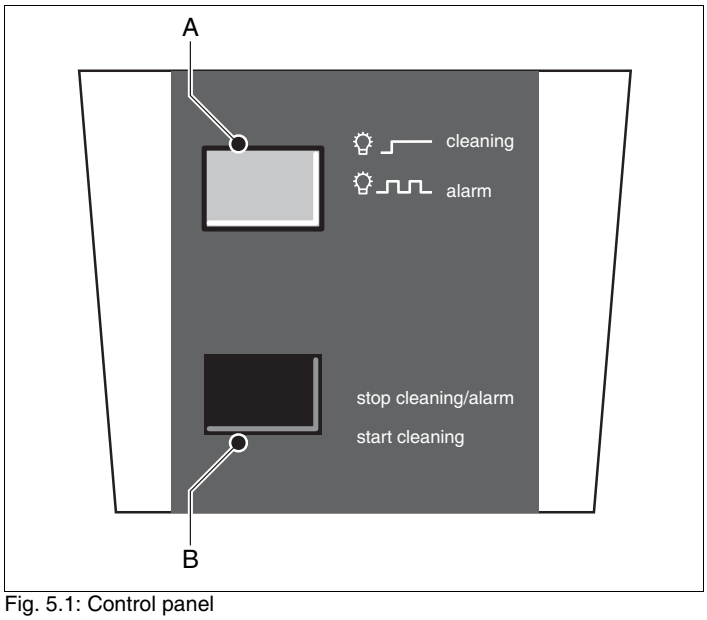


Fig. 5.1: Control panel

5.3 Automatic filter cleaning system

5.3.1 Control light: CLEANING

During normal operation (i.e. with a clean, non-saturated filter cartridge), the Statiflex 400-MS functions fully automatically. As soon as, as a result of the clogging, a miniumum airflow has been reached, the pressure difference switch activates the RotaPulse compressed air cleaning system which subsequently cleans the filter using section controlled jets of compressed air. The particulate then falls into the residue collection barrel.

During the automatic cleaning process the control light (refer to Fig. 5.1A) is **on** ("CLEANING"). The cleaning system stops when the airflow is sufficient again.

When no welding takes place during the automatic cleaning process, the connected extraction fan will start running during 30 seconds after every four compressed airjets to check the pressure difference. This happens max. 15 times. When the airflow hasn't reached the the required airflow rate after 60 compressed airjets, the control light will change into the "ALARM" mode.

- In this case, proceed with section 5.3.2.

5.3.2 Control light: ALARM

When the control light (refer to Fig. 5.1A) **blinks** ("ALARM"), proceed as follows.

- Stop welding.
- In case of manual start/stop:
  Turn off the connected extraction fan.
  In case of automatic start/stop the fan will stop automatically when the welding has stopped.
- Press RESET/START button (refer to Fig. 5.1B) to stop the control light from blinking.
- Press RESET/START button again (refer to Fig. 5.1B) to start off-line cleaning.

During the off-line cleaning cycle the entire filter cartridge is cleaned sectionwise by compressed airjets. This cycle takes approx. one hour.

ATTENTION!
Do not use the machine during the off-line cleaning cycle.

If desired, the off-line cleaning cycle can be interrupted by pressing the RESET/START button (refer to Fig. 5.1B) .

After the cleaning cycle is finished, welding can be continued.

When you continue welding and the control light starts **blinking** again immediately or shortly after the cleaning cycle is finished, the LongLife filter cartridge is saturated and should be replaced.

- For filter replacement refer to section 6.2.1.

	ATTENTION! Saturation or clogging of the filter cartridge results in a decrease of the extraction capacity which could result in a higher concentration of fumes. Therefore, stop welding immediately when the machine enters the ALARM phase.

5.3.3 Off-line cleaning

For more efficient filter cleaning, it is recommended to carry out an off-line cleaning cycle on a regular basis. The most convenient cleaning interval is a matter of experience. As a guideline a frequency of twice a week is suggested, e.g. after working hours.

	ATTENTION! For off-line cleaning after working hours, make sure compressed air is available.

To carry out an off-line cleaning cycle, proceed as follows.

- If applicable: turn off the connected extraction fan.
- Press RESET/START button (refer to Fig. 5.1B) to start off-line cleaning.

The off-line cleaning cycle takes approx. one hour.

	ATTENTION! Do not use the machine during the off-line cleaning cycle.

	If desired, the off-line cleaning cycle can be interrupted by pressing the RESET/START button (refer to Fig. 5.1B) .

6 MAINTENANCE

The product has been designed to function with minimum maintenance. In order to guarantee optimal performance level, regular maintenance and cleaning activities are required which are described in this chapter.

Maintenance intervals can vary depending on the specific working conditions, such as ambient conditions, welding consumables and process(es), base material, coatings on base material and operator procedure. Therefore, it is required that regular inspection of the entire system is carried out. It is recommended a thorough inspection of the system occurs at least once every year.

	WARNING! Overdue maintenance can cause fire.

	WARNING! Always switch **OFF** the connected extraction fan and **disconnect compressed air** before carrying out the maintenance activities below.

	WARNING! Do not use compressed air or high pressure water sprayer to clean LongLife filter cartridge and spark arrester.

6.1 Periodic Maintenance

The maintenance activities in the table below indicated by [*] can be carried out by the user; other activities are strictly reserved for well trained and authorized service engineers.

	CAUTION! When cleaning as needed, take precautions by using personal protection equipment (PPE) such as gloves, respirators and protective clothing. It is recommended that a vacuum cleaner or wet methods be used to clean up any loose particulate that is present in the extraction arm. It may be necessary to use a vacuum cleaner with HEPA rated filtration depending on the type of particulate that is present.

Table 1: Periodic maintenance Statiflex 400-MS

Component	Action	Every month	Every 6 months	Every 12 months
Spark arrester	Check for damage, clogging and saturation. If damaged, clogged or saturated, refer to section 6.2.2.	X		
	Clean with an industrial vacuum cleaner that meets dust class H according to EN 60335-2-69 (HEPA 14).	X [*]		
LongLife filter cartridge	Check for damage, clogging and saturation. If damaged, clogged or saturated, refer to section 6.2.1.	X		
Filter cover and housing	Clean inside with an industrial vacuum cleaner that meets dust class H according to EN 60335-2-69 (HEPA 14) and remove the dust from the filter compartment.	X [*]		
	Clean outside with a mild detergent.		X [*]	
RotaPulse cleaning mechanism	Check proper turning of compressed air rod. Repair/replace if necessary.		X	
	Check the cleaning mechanism for leakage. Repair/replace if necessary.		X	
Residue collection barrel	Check the contents of the residue collection barrel. Empty if necessary; refer to section 6.2.3.	X [*]		
Flexible hose	Check for cracks, holes or deformities. Replace if necessary.	X [*]		

6.2 Filter Replacement

WARNING!
Take necessary precautions so that you and your fellow workers are not over-exposed to particulate. Wear suitable personal protection equipment, such as gloves, respirator, eye glass and protective clothing when disposing of the filter and particulate.

Check with local waste management or local agency(ies) per disposal of filter and residue. If filter has collected certain types and amounts of particulate which local agencies define as hazardous waste, filter may be classified as hazardous waste and will need to be disposed in accordance with federal, state and local regulations - in which at the state level could vary from state to state, and between local municipalities within the state.

6.2.1 LongLife filter cartridge

Replace the LongLife filter cartridge:
- when the control light keeps blinking (shortly) after an off-line cleaning cycle
- when it has been damaged.

Replacement Steps:
Fig. 6.1
1) Disconnect the extraction fan from the input power.
2) Disconect compressed air.
3) Loosen the four clips (B) and remove the filter cover (A).
4) Loosen the hardware and remove the filter cover plate (C).
5) Lift the LongLife filter cartridge (D) up and out of the machine.
6) If required by federal, state and/or local regulations and guidelines, conceal filter in appropriate bag, e.g. plastic bag.

Spare filter cartridges are supplied in a plastic bag. This bag can be used to pack and dispose of the used filter cartridge.

7) Clean the spark arrester and filter compartment with an industrial vacuum cleaner that meets dust class H according to EN 60335-2-69 (HEPA 14).

8) Install a new LongLife filter cartridge.
9) Replace the dismounted parts in reverse order.

6.2.2 Spark arrester

Replace the spark arrester:
- when it is clogged or saturated and cannot be cleaned using a vacuum cleaner; or
- when it has been damaged.

☞	In case the spark arrester has been damaged, it is recommended to also replace the LongLife filter cartridge.

Replacement Steps:
Fig. 6.1
1) Disconnect the extraction fan from the input power.
2) Disconect compressed air.
3) Loosen the four clips (B) and remove the filter cover (A).
4) Remove the spark arrester (E).
5) If required by federal, state and/or local regulations and guidelines, conceal spark arrester in appropriate bag, e.g. plastic bag.

☞	Spare spark arresters are supplied in a plastic bag. This bag can be used to pack and dispose of the used spark arrester.

6) Clean the filter compartment with an industrial vacuum cleaner that meets dust class H according to EN 60335-2-69 (HEPA 14).
7) Install a new spark arrester.
8) Replace the filter cover and fasten the four clips.

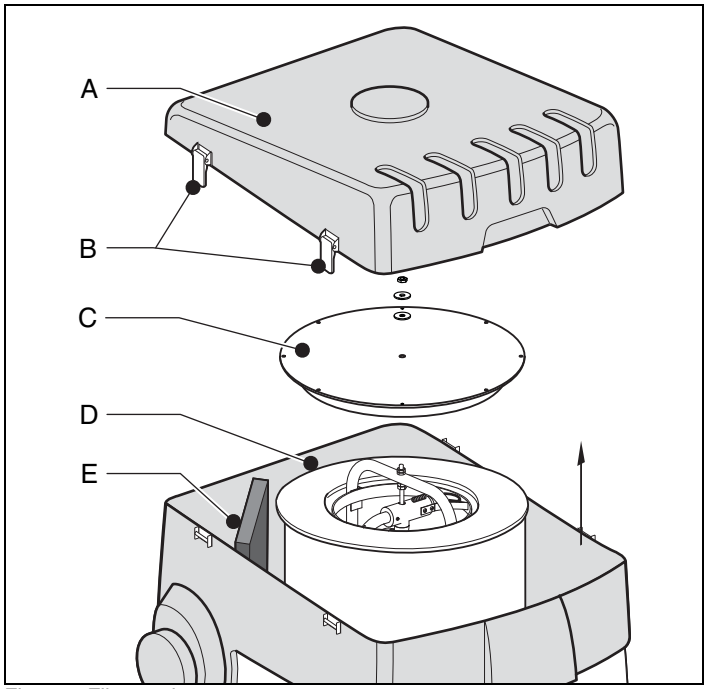


Fig. 6.1: Filter replacement

6.2.3 Emptying the filter residue barrel

Fig. 6.2
Empty the residue collection barrel:
- when full
- (preferably) upon replacement of the filter cartidge

Disposal Steps:
1) Disconnect the extraction fan from the input power.
2) Disconect compressed air.
3) Unscrew the filter residue barrel and remove the sealing ring.
4) Dispose of the filter residue in accordance with federal, state and local regulations.
5) Replace the sealing ring and screw on the barrel.

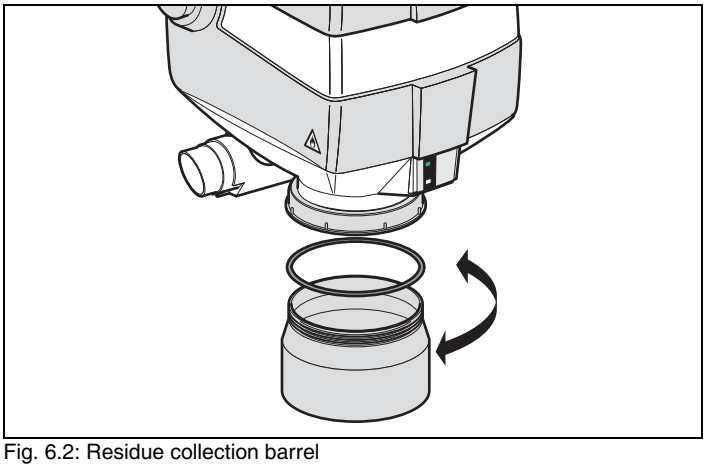


Fig. 6.2: Residue collection barrel

7 TROUBLESHOOTING

Observe all safety guidelines detailed throughout this instruction manual.

☞	A number of problems in the checklist below can also be caused by defects in the connected equipment (refer to section 1.3). This instruction manual only deals with problems and solutions directly related to the product itself.

⚠	**WARNING!** Service and repair should only be performed by Lincoln Electric Factory Trained Personnel. Unauthorized repairs performed on this equipment may result in danger to the technician and machine operator and will invalidate your factory warranty. For your safety and to avoid electrical shock, please observe all safety notes and precautions detailed throughout this instruction manual.

This troubleshooting guide is provided to help you locate and repair possible machine malfunctions. Simply follow the four-step procedure listed below.

Step 1: Symptom
The first column labeled “Symptom” describes possible symptoms that the machine may exhibit. Find the listing that best describes the symptoms that the machine is exhibiting.

Step 2: Locate Problem
The second column “Problem” describes the possible consequences of the found symptom.

Step 3: Possible Cause
The third column labeled “Possible cause” lists the obvious external possibilities that may contribute to the machine symptom.

Step 4: Solution
The fourth column labeled “Solution” provides a course of action for the possible cause. Generally it states to contact your local Lincoln Authorized Field Service Facility.

CAUTION!
If for any reason you do not understand the test procedures or are unable to safely perform the tests and repairs, contact your Local Lincoln Authorized Field Service Facility for technical troubleshooting assitance before you proceed.

Table 2: Troubleshooting guide

Symptom	Problem	Possible Cause	Solution
Poor suction.	Statiflex 400-MS does not function properly.	Outlet blocked.	Remove obstructions from the outlet opening and/or connected ductwork.
		LongLife filter cartridge clogged	Carry out off-line filter cleaning cycle (refer to section 5.3.2) and check that the control light is on.
			Replace LongLife filter cartridge (refer to section 6.2.1).
		Spark arrester clogged.	Clean (refer to section 6.1) or replace (refer to section 6.2.2) the spark arrester.
		Outside air is being extracted.	Check or replace the sealing material.
		Filter cleaning mechanism defective.	Repair or replace filter cleaning mechanism.
Dust or smoke coming out of the outlet opening(s).	Pollution of the facility.	LongLife filter cartridge damaged.	Replace LongLife filter cartridge (refer to section 6.2.1).
		Sealing material on LongLife filter cartridge damaged.	Replace LongLife filter cartridge (refer to section 6.2.1).
Dust or smoke coming out of the inlet connection.	Pollution of the facility.	Outlet(s) blocked.	Remove obstructions from the outlet opening(s) and/or connected ductwork.
		LongLife filter cartridge clogged.	Replace LongLife filter cartridge (refer to section 6.2.1).
		Spark arrester clogged.	Clean (refer to section 6.1) or replace (refer to section 6.2.2) the spark arrester.
Dust or smoke coming out between filter housing and cover.	Pollution of the facility.	Sealing material of filter cover damaged.	Replace sealing material.
Dust or smoke coming out residue collection barrel.	Pollution of the facility.	Residue collection barrel placed incorrectly.	Place residue collection barrel correctly.
		Sealing material of residue collection barrel leaky.	Replace sealing material of residue collection barrel.

Table 2: Troubleshooting guide

Symptom	Problem	Possible Cause	Solution
Control light extinguished during cleaning process.	No indication.	Control light defective.	Replace control light.
		Control PC board defective.	Replace control PC board.
Control light blinks (“ALARM”)	Insufficient airflow.	Saturated LongLife filter.	Carry out off-line filter cleaning cycle (refer to section 5.3.3).
			Replace LongLife filter (refer to section 6.2.1).
Control light keeps blinking (“ALARM”)	No automatic filter cleaning.	Filter cleaning mechanism defective:	
		- 24 VAC magnetic valve defective.	Replace magnetic coil or diaphragm.
		- Control PC board defective.	Replace control PC board.
		- Filter cleaning mechanism defective or worn.	Replace the filter cleaning mechanism.
		- No compressed air or compressed air pressure too low.	Check compressed air system and/or compressed air connection.
		- Pressure difference switch defective.	Replace pressure difference switch.
Machine does not react to pressing RESET/START button.	Activating off-line cleaning and reset not possible.	RESET/START button defective.	Replace RESET/START button.
		Control PC board defective.	Replace control PC board.
		24 VAC supply defective.	Repair 24 VAC supply.

8 SPARE PARTS

The available spare parts for the unit are indicated on the exploded views.

Address your order to your supplier and always state the data below:
- product name and serial number (see the identification label)
- article number of the particular part
- description
- quantity

Table 3: Spare parts Statiflex 400-MS

Item/Description	Part #	Qty
A Cover lock	S23281-60	4
B O ring		1
C Piston mechanism	S23281-61	1
D Membrane valve	S23281-28	1
E Pressure relief valve 6-10 bar (2400-4000 in. WG)	S23281-31	1
F Pressure difference switch	S23281-35	1
G Control light 24V, yellow	S23281-32	1
H Control PC board	S23281-34	1
I Reset/start button	S23281-33	1

Table 3: Spare parts Statiflex 400-MS

Item/Description	Part #	Qty
J Residue collection barrel	S23281-38	1
K Inlet sealing ring	S23281-22	1
L Rubber sealing filter cover	S23281-58	1
M Spark arrester	S23281-24	1
N LongLife filter cartridge FCC 30	K1673-2	1
ITEMS NOT SHOWN:		
Outlet cover	S23281-59	1

**) Suggested extra spare parts*

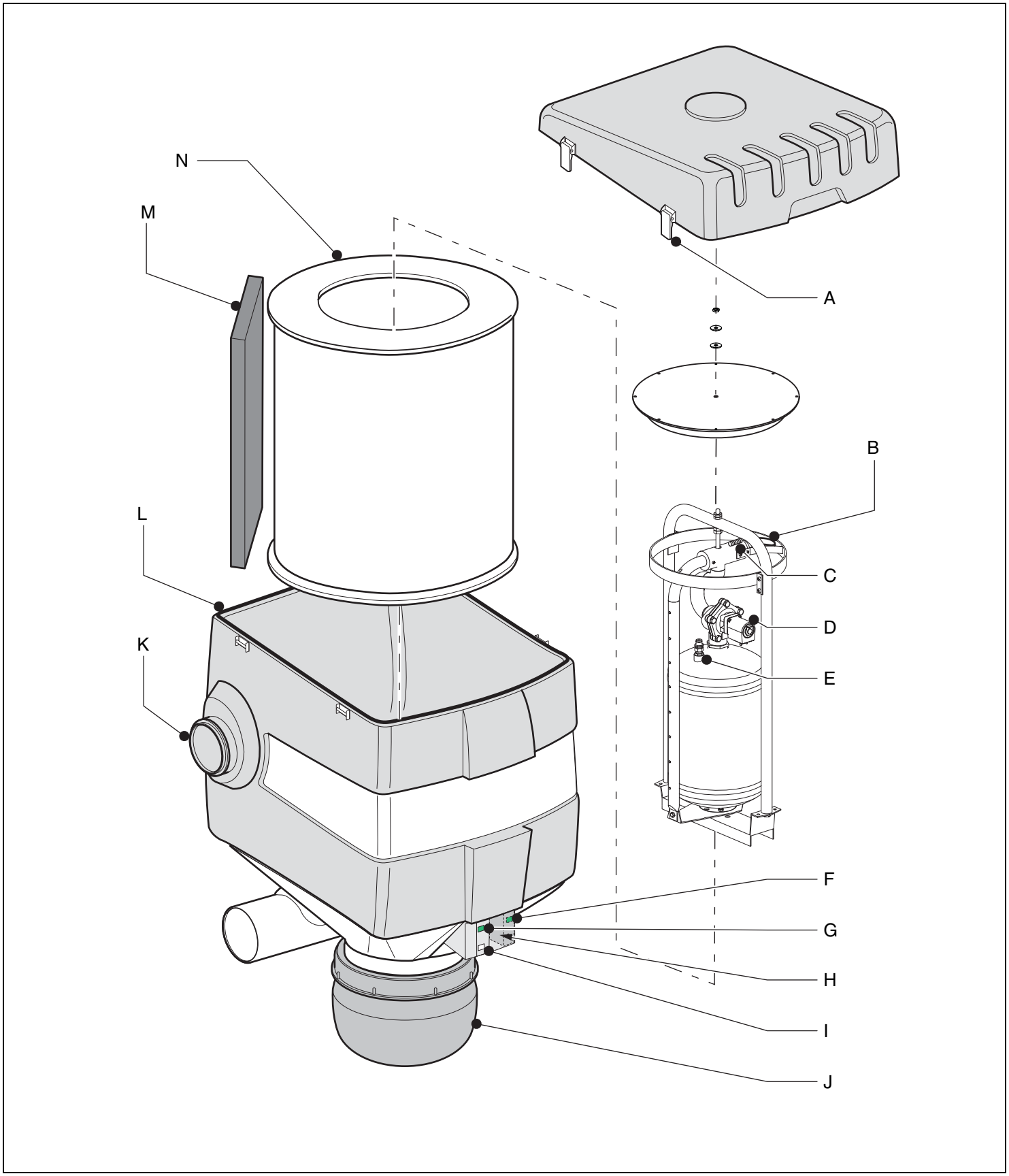
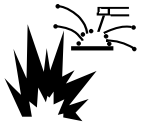


Fig. 8.1: Exploded view Statiflex 400-MS

9 DISPOSAL

After life of the product, dispose it of in accordance with federal, state or local regulations.

			
WARNING	● Do not touch electrically live parts or electrode with skin or wet clothing. ● Insulate yourself from work and ground.	● Keep flammable materials away.	● Wear eye, ear and body protection.
Spanish **AVISO DE PRECAUCION**	● No toque las partes o los electrodos bajo carga con la piel o ropa mojada. ● Aislese del trabajo y de la tierra.	● Mantenga el material combustible fuera del área de trabajo.	● Protéjase los ojos, los oídos y el cuerpo.
French **ATTENTION**	● Ne laissez ni la peau ni des vêtements mouillés entrer en contact avec des pièces sous tension. ● Isolez-vous du travail et de la terre.	● Gardez à l'écart de tout matériel inflammable.	● Protégez vos yeux, vos oreilles et votre corps.
German **WARNUNG**	● Berühren Sie keine stromführenden Teile oder Elektroden mit Ihrem Körper oder feuchter Kleidung! ● Isolieren Sie sich von den Elektroden und dem Erdboden!	● Entfernen Sie brennbarres Material!	● Tragen Sie Augen-, Ohren- und Körperschutz!
Portuguese **ATENÇÃO**	● Não toque partes elétricas e electrodos com a pele ou roupa molhada. ● Isole-se da peça e terra.	● Mantenha inflamáveis bem guardados.	● Use proteção para a vista, ouvido e corpo.
Japanese **注意事項**	● 通電中の電気部品、又は溶材にヒフやぬれた布で触れないこと。 ● 施工物やアースから身体が絶縁されている様にして下さい。	● 燃えやすいものの側での溶接作業は絶対にしてはなりません。	● 目、耳及び身体に保護具をして下さい。
Chinese **警 告**	● 皮肤或濕衣物切勿接觸帶電部件及銲條。 ● 使你自己與地面和工件絕緣。	● 把一切易燃物品移離工作場所。	● 佩戴眼、耳及身體勞動保護用具。
Korean **위 험**	● 전도체나 용접봉을 젖은 헝겁 또는 피부로 절대 접촉치 마십시요. ● 모재와 접지를 접촉치 마십시요.	● 인화성 물질을 접근 시키지 마시요.	● 눈, 귀와 몸에 보호장구를 착용하십시요.
Arabic **تحذير**	● لا تلمس الاجزاء التي يسري فيها التيار الكهربائي أو الالكترود بجلد الجسم أو بالملابس المبللة بالماء. ● ضع عازلا على جسمك خلال العمل.	● ضع المواد القابلة للاشتعال في مكان بعيد.	● ضع أدوات وملابس واقية على عينيك وأذنيك وجسمك.

READ AND UNDERSTAND THE MANUFACTURER'S INSTRUCTION FOR THIS EQUIPMENT AND THE CONSUMABLES TO BE USED AND FOLLOW YOUR EMPLOYER'S SAFETY PRACTICES.

SE RECOMIENDA LEER Y ENTENDER LAS INSTRUCCIONES DEL FABRICANTE PARA EL USO DE ESTE EQUIPO Y LOS CONSUMIBLES QUE VA A UTILIZAR, SIGA LAS MEDIDAS DE SEGURIDAD DE SU SUPERVISOR.

LISEZ ET COMPRENEZ LES INSTRUCTIONS DU FABRICANT EN CE QUI REGARDE CET EQUIPMENT ET LES PRODUITS A ETRE EMPLOYES ET SUIVEZ LES PROCEDURES DE SECURITE DE VOTRE EMPLOYEUR.

LESEN SIE UND BEFOLGEN SIE DIE BETRIEBSANLEITUNG DER ANLAGE UND DEN ELEKTRODENEINSATZ DES HERSTELLERS. DIE UNFALLVERHÜTUNGSVORSCHRIFTEN DES ARBEITGEBERS SIND EBENFALLS ZU BEACHTEN.

● Keep your head out of fumes. ● Use ventilation or exhaust to remove fumes from breathing zone.	● Turn power off before servicing.	● Do not operate with panel open or guards off.	**WARNING**
● Los humos fuera de la zona de respiración. ● Mantenga la cabeza fuera de los humos. Utilice ventilación o aspiración para gases.	● Desconectar el cable de alimentación de poder de la máquina antes de iniciar cualquier servicio.	● No operar con panel abierto o guardas quitadas.	Spanish **AVISO DE PRECAUCION**
● Gardez la tête à l'écart des fumées. ● Utilisez un ventilateur ou un aspirateur pour ôter les fumées des zones de travail.	● Débranchez le courant avant l'entretien.	● N'opérez pas avec les panneaux ouverts ou avec les dispositifs de protection enlevés.	French **ATTENTION**
● Vermeiden Sie das Einatmen von Schweibrauch! ● Sorgen Sie für gute Be- und Entlüftung des Arbeitsplatzes!	● Strom vor Wartungsarbeiten abschalten! (Netzstrom völlig öffnen; Maschine anhalten!)	● Anlage nie ohne Schutzgehäuse oder Innenschutzverkleidung in Betrieb setzen!	German **WARNUNG**
● Mantenha seu rosto da fumaça. ● Use ventilação e exhaustão para remover fumo da zona respiratória.	● Não opere com as tampas removidas. ● Desligue a corrente antes de fazer serviço. ● Não toque as partes elétricas nuas.	● Mantenha-se afastado das partes moventes. ● Não opere com os paineis abertos ou guardas removidas.	Portuguese **ATENÇÃO**
● ヒュームから頭を離すようにして下さい。 ● 換気や排煙に十分留意して下さい。	● メンテナンス・サービスに取りかかる際には、まず電源スイッチを必ず切って下さい。	● パネルやカバーを取り外したままで機械操作をしないで下さい。	Japanese **注意事項**
●頭部遠離烟雾。 ●在呼吸区使用通风或排风来除烟。	●维修前切断电源。	●在没有打开或没有安全罩时不操作。	Chinese **警 告**
● 얼굴로부터 용접가스를 멀리하십시오. ● 호흡지역으로부터 용접가스를 제거하기 위해 가스제거기나 통풍기를 사용하십시오.	● 보수전에 전원을 차단하십시오.	● 판넬이 열린 상태로 작동치 마십시오.	Korean **위 험**
● ابعد رأسك بعيداً عن الدخان. ● استعمل التهوية أو جهاز شفط لدخان للخارج لكي تبعد الدخان عن المنطقة التي تتنفس فيها.	● اقطع التيار الكهربائي قبل القيام بأية صيانة.	● لا تشغل هذا الجهاز اذا كانت الاغطية الحديدية الواقية ليست عليه.	Arabic **تحذير**

LEIA E COMPREENDA AS INSTRUÇÕES DO FABRICANTE PARA ESTE EQUIPAMENTO E AS PARTES DE USO, E SIGA AS PRÁTICAS DE SEGURANÇA DO EMPREGADOR.

使う機械や溶材のメーカーの指示書をよく読み、まず理解して下さい。そして貴社の安全規定に従って下さい。

请详细阅读处理焊料制造商提供的说明以及即将使用的焊接材料，並請遵守貴方的有關劳動保護規定。

이 제품에 동봉된 작업지침서를 숙지하시고 귀사의 작업자 안전수칙을 준수하시기 바랍니다.

اقرأ بتمعن وافهم تعليمات المصنع المنتج لهذه المعدات والمواد قبل استعمالها واتبع تعليمات الوقاية لصاحب العمل.

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